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eCOPS - Electronics Police Record Management System

Prof. V. V. Bhujade

Department of Compter Sci. and Engg.
DMIETR,Sawangi(M),Wardha
bhujadevaibhav@gmail.com

Teena N. Tadas[2]

Department of Compter Sci. and Engg.
DMIETR,Sawangi(M),Wardha
tina12tadas@gmail.com

Sweta P. Lende[1]

Department of Compter Sci. and Engg.
DMIETR,Sawangi(M),Wardha
swetalende@gmail.com

Rohini R.Hiwarkar[3]

Department of Compter Sci. and Engg.
DMIETR,Sawangi(M),Wardha
rohini.hiwarkar@gmail.com

Abstract- This feature is made available to public for interaction with police indirectly. This system registers the complaints from people through online and is helpful to the police department in identifying criminals. In this system any person can register their complaint online.The aim of this project is to develop an E-cops reporting and management system which is easily accessible to the public, police department and the administrative department.

Generally many crimes seen by the public will not reach to the police due to many reasons like fear, lack of time, ignorance. Due to this reason many cases are not even reported to the police station. Though some cases are registered they are not investigated properly due to lack of evidences and cooperation of the public. This project helps the public to report about the crimes to the police without any fear in correct time. This is also helpful for higher authorities of police to have an overview about the progress of the investigation.This feature is made available to public for interaction with police indirectly. This system registers the complaints from people through online and is helpful to the police department in identifying criminals. In this system any person can register their complaint online.The aim of this project is to develop an E-cops reporting and management system which is easily accessible to the public, police department and the administrative department.

Keywords: - FIR, RTI, IPC

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1. INTRODUCTION

1.1 Motivation:

The normal public in India are afraid to give an complaint in police station because they are filled with a false fear about the police department. An online complaint registering system will solve the fears of public and will also help the police department in catching criminals. An online solution is very useful as the solution is inherently distributive. This distributive characteristic of the online solution helps in getting the different police stations to share information and get in contact with one another. Information about the criminals and the police is also made available to the people in this system.

1.2 Application Description:

eCOPS is intended to provide total computerized information system support for the work of the police. Its primary activities are not transparency-related, but help provide police officers with information on criminal cases and on criminals. eCOPS would also help provide division heads and senior officers with management information about crime control, and about administration and support services such as accounting and personnel management. The system can also provide access to information from external

systems in hospitals, jails, passport offices, etc. to help in gathering data on criminals, victims and witnesses.[1]

In India, if a crime is committed, the victim (or a witness) must go to the police station where they live, and report the crime which is then said to be registered. The duty officer in the station fills in a First Information Report (FIR): a statement of details as recalled by the victim. Previously, this has been a paper-based process, and paper records were easily manipulated or lost. With the eCOPS system, a victim could go to any police station (not just their local one) and the duty officer can register the crime direct onto the system. eCOPS' contribution to transparency would arise from that fact that, once a case has been registered on the system server database it cannot easily be changed. The person who registered the case could also get access to case details and progress at any point, either by going to any police station and requesting an officer to access their case on eCOPS, or by accessing their case details online via the Police Web site using an FIR code number that is issued at the time of registration. Available case details would include the FIR, actions taken, actions pending, other crime details, etc. The victim could lodge a complaint if they see from accessing case details that the case has not been registered properly, or that there has been no progress made on the case since it was last accessed. Finally, senior officers in the police service could also use eCOPS to monitor case details

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and progress. All of this affects the transparency of case handling, and the accountability of police officers.[1]

The system is still at a relatively formative stage. At present, it only covers a limited number of functions, and only four pilot locations in the state. There are planned expansions to deal with mobile data gathering, traffic management, analysis of gang activity, police training, and other facets of police work; and a planned roll-out to the whole state.[1]

1.3 Application Drivers/Purpose:

The main purpose behind the eCOPS system was to improve the effectiveness of policy performance; to improve the efficiency of police procedures; for example, by eliminating redundant processes in the registration of criminal cases; and to improve the quality of management information provided for senior policy decision-making, particularly through integration of previously separate information systems.

Within the focus on effectiveness, there was a concern about the non-transparent, even dishonest nature of police work, which had become synonymous with corruption and delay. The intention was that the new system - through its automation of previously human processes, and through its state-wide and online accessibility - would make the registration, processing and follow-up of criminal cases more open. Under the existing regime, many police require a bribe before they are willing to register a case, and also require a bribe to be paid before they answer any query about the case, such as its progress, or other information held on file[1].

It was partly this poor image of police functioning, that led the Chief Minister of the State to impose the system on the police service. There were also drivers from the failure of police to properly prosecute some high-profile criminal cases that had political overtones; something which was politically-damaging and seen as requiring an equally high-profile reaction.[1]

1.4 Stakeholders:

Police officers at all levels are the key stakeholders for the eCOPS system. Victims of crime are the other main group who have consciously been included in the stakeholder map for the system. Though not consciously included, criminals represent the final major stakeholders. Minor stakeholders are the other players in the criminal justice system such as the judiciary and prison systems.[1]

1.5 Recommendations:

Ensure data privacy and security, and system reliability.Data is the bedrock of any e-transparency system, and it must be duly cared for. Proper controls must be put in place to ensure the integrity of the data on the system. These will include technological controls such as application controls (helping eliminate errors in data entry); access controls (such as password systems and other authentication

mechanisms); and communication controls (such as encryption). However, they must also include 'softer' elements such as personnel controls (e.g. separation of duties), and administrative controls (such as data audit, backup and recovery processes). None of this will be effective, though, unless a proper regime of incentives and disincentives in put in place to ensure stakeholders are motivated to uphold data quality.[1]Conduct public awareness campaigns. Most e-transparency applications involve citizens, but Citizens will not make use of those applications if they are unaware of them. Therefore, there needs to be a significant investment in raising public awareness. In cases like the one described, this can also act as a lever to encourage greater uptake of the application by government employees.[1]

2. SYSTEM OVERVIEW

2.1 ARCHITECTURE

There are total three main parts included in user system first is user then constable ant last is higher authority. Let us see the architecture for this user system.
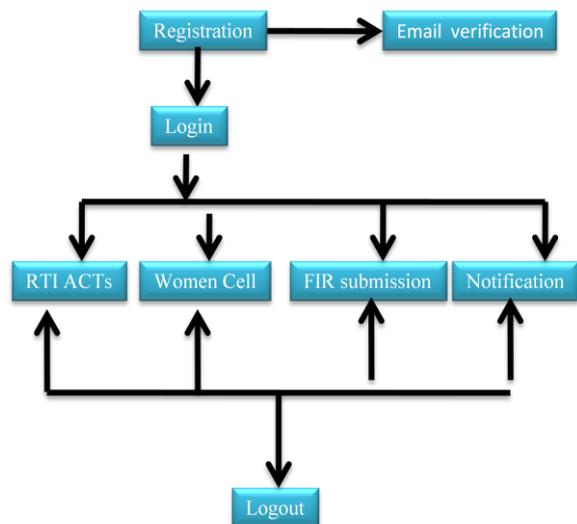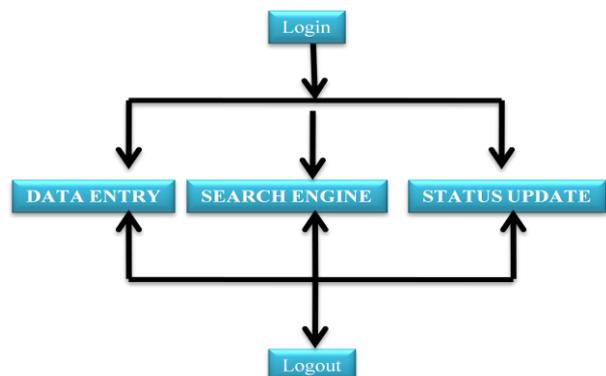

Figure 1. Architecture for User Area
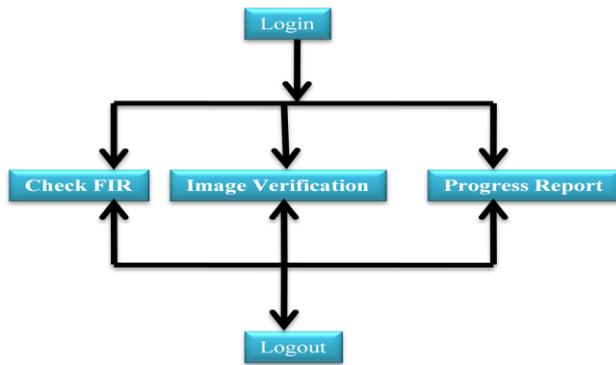

Figure 2. Architecture for Constable Area

Figure 3. Architecture for Higher Authority Area

2.2USER SYSTEM

There are total three main parts included in user system first is user then constable ant last is higher authority. Let us see brief about each starting with user.

2.2.1 USER

The user first have to do registration on site, this include email verification. After doing registration it's email verification is automatically done by the system and after verifying it's email it provide ID and password to user with the help of this the user will permit to enter in the system, that means after entering correct id and password the user will allow to login in the system. As user login in the system he got the four main sections first is RTI ACTs second is women cell then FIR submission is there and the last is Notification. The user have to choose his working area in which he want to work and then proceed.

2.2.2 CONSTABLE

Constable first have to login in the system, then there are three sections on which constable have to work these are data entry then search engine is there and status update. In data entry section the constable enter any newly added data in the system. Search engine is to search any information about user in the system,with the help of search engine the constable searches any information about user then with the help of status update the constable will permit to update the status of recent case in the system.

2.2.3 HIGHER AUTHORITY

The last part of the system is higher authority area in this the higher authority first have to login in the system in this the higher authority first check out the fir submitted by the user is there any fake information present in it or not then the image base verification is performed by higher authority and he will also give the progress report on the fir on which the police working is properly done or not is there delay in the work etc in short the higher authority will give the feedback on the fir i.e. he will give progress report on the fir on which police work.

2.3 MODULES

2.3.1 REGISTRATION AND LOGIN-

In this module, the user first have to register and then it will permit to login in the system.

2.3.2 MAIL BASED LINK VERIFICATION

After registration and login, the user will have to make link verification using mail, i.e. mail based link verification, which make sure that the user will successfully registered or not.

2.3.3 FORGOT PASSWORD FACILITY

If in this case the user unable to remember password, then forgot facility is present in the system.

2.3.4 MULTIPLE LOGIN (ROLE BASE LOGIN)

-User

-Constable

-higher authority

2.3.5 IMAGE BASE VERIFICATION OF ACCUSED(IMAGE PROCESSING)

In image based verification if the data or is already present then the system will try to match the newly found image with the original image.

2.3.6 APPLICATION SUBMISSION FOR USER WITH DOCUMENT

In this module, the user will have to submit the application with it's document by uploading after that FIR will be registered.

-FIR REPORTING

-IPC (INDIAN PANAL CODE) GENERATION AT FIR TIMING

The Indian Penal code, in its basic form, is a document that lists all the cases and punishments that a person committing any crimes is liable to be charged with. It covers any Indian citizen or a person of Indian origin.

2.3.7 ADMIN BASED FIR APPROVAL AND EMAIL NOTIFICATION

The FIR registered will be checked by the admin, in this fir approval and email notification is done.

2.3.8 RTI

Right to information act link is available to request for any information to the government.

2.3.9 IMAGE COMPARISON

It will check that the given photo sketch is available in criminal database or not by comparing two images.

CONCLUSION

This project will help users to fill online FIR as well as check status of their FIR. This project has also provided facilities of RTI act, link verification and encryption algorithm that will help validate users identity as well as secure document given by user. An image comparison algorithm is written to help cops check an existing person online. Overall this project will be a great help to all people who are unable to launch FIR and contact higher authority and therefore it will reduce crimes.

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